

Technical Report Documentation Page

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Traffic Noise Levels in Beverly Hills Near Santa Monica Boulevard

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6. PERFORMING ORGANIZATION**7. AUTHOR(S)**

Louis Bourget

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Department of Public Works
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Materials and Research Department

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Introduction

The purpose of this study is to identify traffic noise conditions existing in proximity to Santa Monica Boulevard in Beverly Hills, as of October 1963. Various degrees of exposure to this noise at distances from 50 to 600 feet are documented by reproductions of strip chart recordings showing A scale decibel levels (dbA) separately for day and night conditions.

A key map to all noise recording locations is included just inside the back cover of this report. This map is a fold-out type to facilitate reference while examining the noise charts.

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DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

**TRAFFIC NOISE LEVELS
IN BEVERLY HILLS
NEAR SANTA MONICA BOULEVARD**

63-54

November 1963



State of California
Department of Public Works
Division of Highways
Materials and Research Department

November 1963

Your: VII-LA-162 (2) BH

Our: Proj. W.O. S-63319

Mr. A. C. Birnie
District Engineer
District VII
California Division of Highways
Los Angeles, California

Attention: Mr. C. W. Ford
Mr. A. D. Mayfield

Dear Sir:

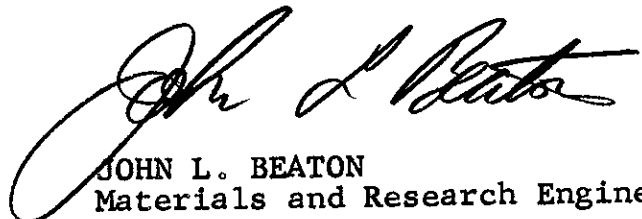
Submitted in compliance with a request from
Mr. C. W. Ford dated October 14, 1963, and further instructions
from Mr. A. D. Mayfield dated October 25, 1963, is a report of:

TRAFFIC NOISE LEVELS IN BEVERLY HILLS

NEAR SANTA MONICA BOULEVARD

Study by	Structural Materials Section
Under general direction of	E. F. Nordlin
Measurements by	L. Bourget and M. Greenstein
Report by	Louis Bourget

Very truly yours,



JOHN L. BEATON
Materials and Research Engineer

LB:mw

INTRODUCTION

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DISCUSSION

The sound equipment employed for this study was made by the General Radio Company and will be listed at the end of this commentary. It should be sufficient to note that the equipment meets or exceeds the current American Standards Association Specification S1.4-1961 for general purpose sound level meters and that field calibration devices were employed to check the instruments before and after every "run" on each chart. The levels are portrayed in decibels with the A weighting network (dbA) as currently preferred by the International Standards Organization for the evaluation of vehicle noise.

The noise charts clearly show that not all of the recorded sounds relate to motor vehicles on Santa Monica Boulevard. Many noise peaks are from local vehicles passing along the side streets at the measuring locations. There were also peaks from distant aircraft and one case of severe train noise while measuring in front of the Good Shepherd Church at Location 2.

Therefore the noise peaks are coded on every chart as follows:

D equals a diesel truck or bus noise from Santa Monica Boulevard.

G equals a gasoline powered truck noise from Santa Monica Boulevard.

M equals a motorcycle noise from Santa Monica Boulevard.

SC equals a sports car noise from Santa Monica Boulevard.

A equals an aircraft noise.

LOC equals a local vehicle passing the instrument
at the location.

There are many separate notes on the charts to serve as helpful reminders of this simple coding system and to identify any other unusual noises encountered.

Please note that the 70 dbA line is emphasized on every chart by a heavier inked line. This is done to facilitate comparisons. All daytime charts have the 70 dbA line in the center, but most night charts required different calibration according to the prevailing noise ranges encountered. Therefore, please observe the position of the 70 dbA reference line before evaluating noise levels or comparing one chart with another.

The noise levels at Location 2 represent the greatest exposure to Santa Monica Boulevard traffic and were obtained near the front door of the Good Shepherd Church. This is typical of any similar exposure along Santa Monica Boulevard.

All other locations show progressively less noise from Santa Monica Boulevard, according to distance, and more from local sources until finally the local sources dominate the situation completely as shown on Charts 3B and 4B.

The 4B DAY and 4B NIGHT charts represent the only case in which the same number refers to separate locations. Both are the same distance from Santa Monica Boulevard. We had to shift the DAY location because of a power lawnmower. The local traffic was similar at each position.

In summary, the charts speak for themselves and are an accurate portrayal of noise conditions prevailing at the time of measurement.

EQUIPMENT LIST

General Radio Type 1551-C Sound Level Meter.

General Radio Type 1521-A Graphic Level Recorder.

General Radio Type 1552-B Sound Level Calibrator.

General Radio Type 1307-A Transistor Oscillator.

Cornell-Dubilier Model 12M6 Power Converter, 12 volt D.C. to
110 volt, 60 cycle AC (this device permits operation
of the recorder from the cigarette lighter socket
in an automobile).

A heavy duty tripod (for the Sound Level Meter) and various
cables and accessories for field operation.

